Office of Solid Waste



# **Environmental Fact Sheet**

# Advance Notice of Proposed Rulemaking for Options on Mixed Waste Storage

The Environmental Protection Agency (EPA) through this Advance Notice of Proposed Rulemaking (ANPR) seeks comment on options for providing regulatory flexibility for commercial generators of mixed low-level radioactive waste (MLLW), during storage of these wastes. EPA also requests information from generators of MLLW about volumes and characterization of mixed waste in storage, and the costs of managing mixed waste.

### **Background**

Mixed waste is a radioactive hazardous waste. It is regulated under two authorities: 1) the Resource Conservation and Recovery Act (RCRA), as implemented by EPA or authorized states for the hazardous waste constituent; and 2) the Atomic Energy Act of 1954, as amended (AEA), for the radiological component of mixed waste as implemented by either the Department of Energy (DOE), or the Nuclear Regulatory Commission (NRC) or its Agreement States, for mixed waste containing source, special nuclear, or byproduct material generated by non-DOE facilities.

## **Summary**

This ANPR describes several options EPA is considering to make our regulations more flexible for generators of MLLW. We request ideas on alternatives, and comments on applicability and implementation issues relating to the options described. We are exploring regulatory flexibility for stored mixed waste in response to generators' concerns about dual regulation of MLLW, and radiation exposures of workers. We are considering modeling our approach after the one used for waste military munitions in the Military Munitions Rule (MMR) which was published February 12, 1997 (62 FR 6621). The MMR identifies when conventional munitions become a hazardous waste subject to RCRA Subtitle C.

#### **Conditional Exemption for Stored MLLW**

A conditional exemption approach for stored MLLW could provide regulatory flexibility to generators who store MLLW on-site and who meet certain

conditions. The basis of this approach might be the technical adequacy of the NRC or NRC Agreement State licensing process and regulatory requirements. We are seeking comment through the ANPR on the appropriateness of eliminating RCRA storage permitting requirements normally applicable to stored mixed waste where the following kinds of conditions are met:

- ! the generator has a valid NRC or Agreement State license for management of low-level radioactive wastes;
- ! wastes are managed safely and mismanagement is unlikely;
- ! appropriate safeguards, recordkeeping, and monitoring are in place; and
- ! penalties or other consequences may be imposed if the governing regulatory framework is not followed.

#### **Decay-in-Storage for MLLW**

Under an NRC or Agreement State license, a generator of low-level radioactive waste may be allowed a specific, limited storage time frame (based on the radionuclide and its half-life) for decay-in-storage. A RCRA exemption for mixed wastes undergoing decay-in-storage could address a major concern of mixed waste generators. Such management would also reduce or eliminate worker exposures to radionuclides in keeping with NRC's ALARA (as low as reasonably achievable) goals for radiation exposures. The exemption for decay-in-storage would end when the radioactivity had decayed to the level specified in the generator's NRC license. At that point the waste would be subject to applicable provisions of Subtitle C of RCRA.

#### **Treatment on-site**

EPA is also considering exempting the on-site treatment of MLLW from RCRA Subtitle C regulation, with the added conditions that the mixed waste is treated on-site, and is physically/chemically treated in accord with the generator's NRC license and in a tank or container.

#### **Implementation**

EPA may require a generator to notify us when: a storage or treatment unit is used to store or treat MLLW; and a conditional exemption is claimed for that unit. We may use the MMR precedent for units that do not comply with the required conditions. In the MMR, non-compliant facilities are subject to RCRA Subtitle C from the time of non-compliance. We may require generators to notify us when they do not meet all of the conditions. Alternately, we may rely on NRC for direct enforcement of the license regarding releases.

#### For More Information

The ANPR and this fact sheet are available in electronic format on the Internet at <a href="http://www.epa.gov/radiation/mixed-waste">http://www.epa.gov/radiation/mixed-waste</a>. To order copies of this document, call the RCRA Hotline, weekdays, 9:00 a.m. to 6:00 p.m.. Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). Long-distance callers may call 1-800-424-9346 or TDD 1-800-553-7672. Write to the RCRA Information Center (5305W), US EPA, 401 M Street SW, Washington, DC 20460. Address e-mail to rcra-docket@epamail.epa.gov.